IN THE CLAIMS

Please cancel without prejudice claims 33-86.

Please amend claims 28-32 as indicated below.

Please add new claims 87-133 as indicated below.


1. – 27. (Canceled)


28. (Currently Amended)        A method for processing encoded data, said method comprising ~~the steps of~~:

receiving an indication of ~~the~~ an amount of data used to encode importance levels over ~~n~~ a plurality of tiles, the indication embedded in the encoded data;

determining a predetermined amount of the encoded data to decode based on the amount of data used to encode the importance levels in order to maintain substantially identical fidelity over the plurality of tiles; and

decoding only the predetermined amount of the encoded data over the plurality of tiles ~~so that decoded data is obtained with the same fidelity over each tile~~.


29. (Currently Amended)        The method defined in Claim 28 wherein the decoding only the portion of the encoded data comprises decoding the encoded data starting with highest importance level and continuing in succession to lower importance levels until ~~a~~ the predetermined amount of the encoded data has been decoded.


30. (Currently Amended)        An apparatus for processing encoded data, said apparatus comprising:

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means for receiving an indication of ~~the~~ an amount of data used to encode importance

levels over ~~n~~ a plurality of tiles, the indication embedded in the encoded data;

means for determining a predetermined amount of the encoded data to decode based on

the amount of data used to encode the importance levels in order to maintain substantially

identical fidelity over the plurality of tiles; and

means for decoding only the predetermined amount of the encoded data over the plurality

of tiles~~so that decoded data is obtained with the same fidelity over each tile~~.


31. (Currently Amended) The apparatus defined in Claim 30 wherein the means for decoding

comprises means for decoding the encoded data starting with highest importance level and

continuing in succession to lower importance levels until ~~a~~ the predetermined amount of the

encoded data has been decoded.


32. (Currently Amended) A computer software product including a medium readable by a

processor, the medium having stored thereon a sequence of instructions which, when executed by

the processor, causes the processor to:

receive an indication of the amount of data used to encode importance levels over ~~n~~ a

plurality of tiles, the indication embedded in the encoded data;

determine a predetermined amount of the encoded data to decode based on the amount of

data used to encode the importance levels in order to maintain substantially identical fidelity over

the plurality of tiles; and

decode only the predetermined amount of the encoded data over the plurality of tiles~~so

that decoded data is obtained with the same fidelity over each tile~~.


33. - 86. (Canceled)

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87. (New)     The method of claim 29, wherein at least two of the tiles have different amounts of data decoded for at least one of the importance levels.

88. (New)     The method of claim 28, wherein the indication comprises a tag having bits versus importance (BVI) information for each of the importance levels, each tag indicating an amount of data encoded for a respective importance level.

89. (New)     The method of claim 88, wherein the BVI tag comprises:

a first portion to indicate a number of importance levels encoded in a component currently being described by the BVI tag; and

a second portion to indicate an amount of data encoded for the importance levels specified by the first portion.

90. (New)     The method of claim 89, wherein the first portion of the BVI tag is selected at encode time to communicate with interest points in a rate-distortion curve.

91. (New)     The method of claim 89, wherein the BVI tag further comprises:

a third portion to indicate a length of the BVI tag; and

a fourth portion to identify the component associated with the first portion.

92. (New)     The method of claim 91, wherein the BVI tags for all importance levels are arranged starting with all importance level description for a first component followed by all importance level description of a next component.

93. (New)     The method of claim 91, wherein the BVI tag further comprises an optional fifth portion to pad a predetermined value at an end of the BVI tag to enable the BVI tag to have a number of even bytes indicated in the third portion.

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94. (New)     The method of claim 88, wherein the BVI tag is stored within a main header of the encoded data.

95. (New)     The method of claim 29, further comprising:

determining a percentage of data to be decoded for one of the importance levels; and

decoding the tiles for the determined percentage of encoded data for each of the importance levels until the predetermined amount of the encoded data has been decoded.

96. (New)     The method of claim 95, wherein for each tile in each importance level, a substantially identical percentage of encoded data over each tile and each importance level is decoded.

97. (New)     The method of claim 88, wherein the encoded data is arranged in a pyramidal alignment, wherein the BVI tag further indicates an amount of data from which an amount of data allocated for decoding is subtracted.

98. (New)     The method of claim 97, further comprising:

for each pyramid level, determining an amount of encoded data to be truncated across all importance levels using the BVI tag; and

decoding the encoded data for a respective pyramid level by truncating the determined amount of encoded data.

99. (New)     The method of claim 98, wherein the determined amount of encoded data to be truncated represents one or more importance levels to be truncated.

100. (New)     The method of claim 97, further comprising:

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for each pyramid level, determining an amount of encoded data to be skipped prior to decoding across all importance levels using the BVI tag; and

decoding the encoded data for a respective pyramid level by skipping the determined amount of encoded data.

101. (New)    The method of claim 100, wherein the determined amount of encoded data to be truncated represents one or more importance levels to be skipped prior to decoding.

102. (New)    The apparatus of claim 31, wherein at least two of the tiles have different amounts of data decoded for at least one of the importance levels.

103. (New)    The apparatus of claim 30, wherein the indication comprises a tag having bits versus importance (BVI) information for each of the importance levels, each tag indicating an amount of data encoded for a respective importance level.

104. (New)    The apparatus of claim 103, wherein the BVI tag comprises:

a first portion to indicate a number of importance levels encoded in a component currently being described by the BVI tag; and

a second portion to indicate an amount of data encoded for the importance levels specified by the first portion.

105. (New)    The apparatus of claim 104, wherein the first portion of the BVI tag is selected at encode time to communicate with interest points in a rate-distortion curve.

106. (New)    The apparatus of claim 104, wherein the BVI tag further comprises:

a third portion to indicate a length of the BVI tag; and

a fourth portion to identify the component associated with the first portion.

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107. (New)    The apparatus of claim 106, wherein the BVI tags for all importance levels are arranged starting with all importance level description for a first component followed by all importance level description of a next component.

108. (New)    The apparatus of claim 106, wherein the BVI tag further comprises an optional fifth portion to pad a predetermined value at an end of the BVI tag to enable the BVI tag to have a number of even bytes indicated in the third portion.

109. (New)    The apparatus of claim 103, wherein the BVI tag is stored within a main header of the encoded data.

110. (New)    The apparatus of claim 31, further comprising:

    means for determining a percentage of data to be decoded for one of the importance levels; and

    means for decoding the tiles for the determined percentage of encoded data for each of the importance levels until the predetermined amount of the encoded data has been decoded.

111. (New)    The apparatus of claim 110, wherein for each tile in each importance level, a substantially identical percentage of encoded data over each tile and each importance level is decoded.

112. (New)    The apparatus of claim 103, wherein the encoded data is arranged in a pyramidal alignment, wherein the BVI tag further indicates an amount of data from which an amount of data allocated for decoding is subtracted.

113. (New)    The apparatus of claim 112, further comprising:

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for each pyramid level, means for determining an amount of encoded data to be truncated across all importance levels using the BVI tag; and

means for decoding the encoded data for a respective pyramid level by truncating the determined amount of encoded data.

114. (New)    The apparatus of claim 113, wherein the determined amount of encoded data to be truncated represents one or more importance levels to be truncated.

115. (New)    The apparatus of claim 112, further comprising:

for each pyramid level, means for determining an amount of encoded data to be skipped prior to decoding across all importance levels using the BVI tag; and

means for decoding the encoded data for a respective pyramid level by skipping the determined amount of encoded data.

116. (New)    The apparatus of claim 115, wherein the determined amount of encoded data to be truncated represents one or more importance levels to be skipped prior to decoding.

117. (New)    The computer software product of claim 32, wherein the processor is further to decode the encoded data starting with highest importance level and continuing in succession to lower importance levels until the predetermined amount of the encoded data has been decoded.

118. (New)    The computer software product of claim 117, wherein at least two of the tiles have different amounts of data decoded for at least one of the importance levels.

119. (New)    The computer software product of claim 32, wherein the indication comprises a tag having bits versus importance (BVI) information for each of the importance levels, each tag indicating an amount of data encoded for a respective importance level.

120. (New)    The computer software product of claim 119, wherein the BVI tag comprises:

a first portion to indicate a number of importance levels encoded in a component currently being described by the BVI tag; and

a second portion to indicate an amount of data encoded for the importance levels specified by the first portion.

121. (New)    The computer software product of claim 120, wherein the first portion of the BVI tag is selected at encode time to communicate with interest points in a rate-distortion curve.

122. (New)    The computer software product of claim 120, wherein the BVI tag further comprises:

a third portion to indicate a length of the BVI tag; and

a fourth portion to identify the component associated with the first portion.

123. (New)    The computer software product of claim 122, wherein the BVI tags for all importance levels are arranged starting with all importance level description for a first component followed by all importance level description of a next component.

124. (New)    The computer software product of claim 122, wherein the BVI tag further comprises an optional fifth portion to pad a predetermined value at an end of the BVI tag to enable the BVI tag to have a number of even bytes indicated in the third portion.

125. (New)    The computer software product of claim 119, wherein the BVI tag is stored within a main header of the encoded data.

126. (New)    The computer software product of claim 117, wherein the processor is further to:

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determine a percentage of data to be decoded for one of the importance levels, and

decode the tiles for the determined percentage of encoded data for each of the importance

levels until the predetermined amount of the encoded data has been decoded.

127. (New)    The computer software product of claim 126, wherein for each tile in each

importance level, a substantially identical percentage of encoded data over each tile and each

importance level is decoded.

128. (New)    The computer software product of claim 117, wherein the encoded data is

arranged in a pyramidal alignment, wherein the BVI tag further indicates an amount of data from

which an amount of data allocated for decoding is subtracted.

129. (New)    The computer software product of claim 128, wherein the processor is further to:

for each pyramid level, determine an amount of encoded data to be truncated across all

importance levels using the BVI tag, and

decode the encoded data for a respective pyramid level by truncating the determined

amount of encoded data.

130. (New)    The computer software product of claim 129, wherein the determined amount of

encoded data to be truncated represents one or more importance levels to be truncated.

131. (New)    The computer software product of claim 128, wherein the processor is further to:

for each pyramid level, determine an amount of encoded data to be skipped prior to

decoding across all importance levels using the BVI tag, and

decode the encoded data for a respective pyramid level by skipping the determined

amount of encoded data.

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132. (New)    The computer software product of claim 131, wherein the determined amount of encoded data to be truncated represents one or more importance levels to be skipped prior to decoding.


133. (New)    A data processing system, comprising:

a processor;

a memory coupled to the processor for storing instructions, when executed from the memory, cause the processor to

receive an indication of an amount of data used to encode importance levels over a plurality of tiles, the indication embedded in the encoded data,

determine a predetermined amount of the encoded data to decode based on the amount of data used to encode the importance levels in order to maintain substantially identical fidelity over the plurality of tiles, and

decode only the predetermined amount of the encoded data over the plurality of tiles.